

ABSTRACT OF THE DISCLOSURE

A method and processing tool are provided for controlling trimming of a gate electrode structure containing a gate electrode layer with a first dimension by determining the first dimension of the gate electrode structure, choosing a target trimmed dimension, feeding forward the first dimension and the target trimmed dimension to a process model to create a set of process parameters, performing a trimming process on the gate electrode structure, including controlling the set of process parameter, trimming the gate electrode structure, and measuring a trimmed dimension of the gate electrode structure. The trimming process may be repeated at least once until the target trimmed dimension is obtained, where the trimmed dimension may be fed backward to the process model to create a new set of process parameters.